

PARENT FACT SHEET

DISORDER

Short Chain Acyl-CoA Dehydrogenase Deficiency (SCAD)

CAUSE

People with Short Chain Acyl-CoA Dehydrogenase deficiency have problems breaking down fat into energy for their body. Most babies with newborn screening results showing SCAD never have symptoms. It occurs when an enzyme called “short chain Acyl-CoA dehydrogenase” is either missing or not working properly. It also breaks down fat already stored in the body.

Energy from fat keeps us going whenever our bodies run out of the main source of energy glucose. Our bodies rely on fat when we do not eat for a stretch of time-like sleeping during the night or missing a meal. Some people with SCAD cannot break down fat for energy. However, most people with SCAD do not seem to have this problem and do not ever develop symptoms.

IF NOT TREATED

The symptoms can start as early as the first week of life. If untreated, harmful substances from the body spill into the blood and urine. This is called a metabolic crisis. If a metabolic crisis is not treated, a child with SCAD can develop: breathing problems, seizures and coma-sometimes leading to death.

TREATMENT OPTIONS

- Your doctor will work with a metabolic specialist and dietitian to care for your child. Lifelong treatment is usually needed.
- Avoid going a long time without food. These babies need to eat more often to avoid low blood sugar. They should not go without eating for more than 4-6 hours. Some babies will need to eat more often than this.
- A low fat, high carbohydrate diet is often recommended. Your dietitian will help plan any diet changes.
- L-Carnitine and Riboflavin may be prescribed by your doctor. L-Carnitine is a safe and natural substance that helps the body create energy and rid the body of harmful wastes. Riboflavin is vitamin B2 and a few children have been helped by taking it.
- Contact your child’s doctor immediately at the start of any illness.

IF TREATED

It is not known how effective treatment is in preventing problems. Children who are treated early may be able to live healthy lives with typical growth and development. Some children may continue to have learning delays, muscle weakness and other health problems despite treatment.